

sterigma, has numerous cells, especially towards the endodermal upper surface. As the sterigma is only connected with the subumbrella at its thin root, it otherwise projects freely into the hollow space of the coronal intestine, extending into the coronal sinus with the proximal half, and into the eight tentacular coronal pouches with the distal half. The sterigma is covered on its convex outer surface by the usual endoderm of the subumbrellal wall of the coronal intestine. On the concave inner surface, which encloses a genital sinus with repeated archings-out, this endoderm is transformed into germinal epithelium, which forms reproductive elements.

The germinal epithelium of the endoderm (fig. 16, *ds*), which forms large egg cells in the female, and spermatid follicles nearly twice the size in the male, is found exclusively on the concave inner surface of the shell-shaped, bent-in fulcral shield, as lining of the genital sinus enclosed by the shield. The sinus has a very complicated form, as the scutiform sterigma is turned over concavely, not only at its abaxial (outer), but also at its lateral surfaces, so that it is repeatedly arched outwards. The folded-over, concave, axial half is, moreover, fused for the most part with the convex abaxial half in such a manner that only a narrow passage leads from the hollow space of the coronal intestine into that of the genital sinus. This narrow passage is the "apertura sinus genitalis" (*sa*); it is difficult to find, and appears both in *Nauphanta* and in *Atolla* to lie turned towards the two genitalia belonging to an interradial pair, at the interradial side of the sterigmatal root. This aperture was the more difficult to find in the two preserved spirit specimens, as the hollow space of the sinus was almost entirely filled with coagulated slime (?), and the epithelium in great part destroyed. Both the ripe egg cells and the ripe balls of spermatozoa pass from the germinal epithelium into the gelatinous plate of the sterigma, and are enclosed here in thin-walled fulcral capsules. These burst later on, and the ripe reproductive elements probably do the same, then fall directly into the hollow space of the coronal intestine of the genital sinus, through whose aperture they are emptied into the coronal intestine, from thence by the gastral openings into the stomach and then outside through the mouth.

Sub-family, COLLASPIDÆ, Hæckel, 1879.

Ephyridæ, with 16 to 18 sense clubs, and the same number of tentacles, with 32 to 64 marginal lobes, and 8 separate genitalia.

Atolla,¹ Hæckel, 1879.

Ephyrida, with 16 to 32 rudimentary sense clubs, and the same number of tentacles, with 32 to 64 marginal lobes, and 64 to 128 lobe pouches. Central stomach opened by four perradial gastral openings into a coronal sinus, from whose distal

¹ *Atolla* = an island surrounded by coral reefs.